

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**APPLICANT(S): LEE, Jong-Goo, et al.**

**ART UNIT: 2179**

**APPLICATION NO.: 10/743,476**

**EXAMINER: THERIAULT, Steven B.**

**FILED: December 23, 2003**

**DATED: July 7, 2008**

**FOR: PROACTIVE USER INTERFACE**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF**

**REAL PARTY IN INTEREST**

The real party in interest is Samsung Electronics Co. Ltd., the assignee of the subject application, having an office at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea.

**RELATED APPEALS AND INTERFERENCES**

To the best of Appellant's knowledge and belief, there are no currently pending related appeals, interferences or judicial proceedings.

**STATUS OF CLAIMS**

**A. TOTAL NUMBER OF CLAIMS IN THE APPLICATION**

There are forty (40) claims in the application.

**B. STATUS OF ALL THE CLAIMS IN THE APPLICATION**

1. Claims cancelled: 8-108 and 142-179
2. Claims withdrawn from consideration but not cancelled: none.
3. Claims pending: Claims 1-7 and 109-141.
4. Claims allowed: none.
5. Claims rejected: Claims 1-7 and 109-141.
6. Claims objected to: none.

**C. CLAIMS ON APPEAL**

The claims on appeal are: Claims 1-7 and 109-141.

**STATUS OF AMENDMENTS**

All amendments filed to date have been entered. Thus, the Appendix to this Appeal Brief includes Claims 1-7 and 109-141, of which the status of Claims 8-108 and 142-179 is indicated as cancelled, the status of Claims 4 and 5 is indicated as "Original", and the status of Claims 1-3, 6, 7 and 109-141 is indicated as "Previously Presented".

## **SUMMARY OF THE CLAIMED SUBJECT MATTER**

### **CLAIM 1 – INDEPENDENT**

The invention of Claim 1 relates to a proactive user interface for a computational device having an operating system, with the proactive user interface including an interface unit for communicating between a user and the operating system. See, Figs. 1-7C, page 7, line 33, to page 8, line 3, and page 9, line 19, to page 10, line 9, of the Specification.<sup>1</sup>

The proactive user interface also includes a learning module for detecting at least one pattern of interaction of the user with the interface unit and for proactively altering at least one function of the interface unit according to the detected pattern. See, page 9, line 19, to page 10, line 16, and page 15, lines 1-7, page 12, lines 8-23, of the Specification.

### **CLAIM 2 – DEPENDENT**

The invention of Claim 2 includes each recitation of Claim 1, with the at least one pattern being selected from the group consisting of a pattern determined according to at least one previous interaction of the user with the interface unit, and a predetermined pattern, or a combination thereof. See, page 9, line 35, to page 10, line 24, of the Specification.

### **CLAIM 3 – DEPENDENT**

The invention of Claim 3 includes each recitation of Claim 1, with the interface unit featuring a graphical display and the altering of the at least one function of the interface unit alters at least a portion of the graphical display. See, page 9, line 23, to page 10, line 15, and page 12, lines 8-15, of the Specification.

### **CLAIM 4 – DEPENDENT**

The invention of Claim 4 includes each recitation of Claim 3, with the altering of at least a portion of the graphical display including selecting a menu for display according to the

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<sup>1</sup> Page and line number references are made to the Non-Redline version of the Substitute Specification filed January 20, 2005. The above citations are not limiting, as additional support is believed to exist in the specification, figures and priority documents.

detected pattern; and displaying the menu. See, page 9, line 23, to page 10, line 15, of the Specification.

#### **CLAIM 5 – DEPENDENT**

The invention of Claim 5 includes each recitation of Claim 4, with the selecting of the menu including constructing a menu from a plurality of menu options. See, page 16, lines 3-17, of the Specification.

#### **CLAIM 6 – DEPENDENT**

The invention of Claim 6 includes each recitation of Claim 1, with the interface unit featuring an audio display and the altering of at least one function of the interface unit alters at least one audible sound produced by the computational device. See, page 11, lines 5-10, of the Specification.

#### **CLAIM 7 – DEPENDENT**

The invention of Claim 7 includes each recitation of Claim 1, as with the computational device being selected from a group consisting of a regular computer, an ATM, mobile information devices including a cellular telephone, a PDA, or a consumer appliance having an operating system. See, page 10, lines 25-30, of the Specification.

#### **CLAIM 109 – DEPENDENT**

The invention of Claim 109 includes each recitation of Claim 7, with the learning module including a knowledge base for holding information gathered as a result of interactions with the user and/or the operating system. See, page 13, line 31, to page 14, line 7, and page 16, line 34, to page 18, line 20, of the Specification.

#### **CLAIM 110 – DEPENDENT**

The invention of Claim 110 includes each recitation of Claim 109, with the knowledge base including a plurality of integrated knowledge determined from the behavior of the user and from preprogrammed information. See, page 4, lines 8-14, page 18, lines 14-20, of the Specification.

**CLAIM 111 – DEPENDENT**

The invention of Claim 111 includes each recitation of Claim 109, with the learning module further including a plurality of sensors for perceiving a state of the operating system. See, page 14, lines 1-7, and page 30, line 33, to page 31, line 6, of the Specification.

**CLAIM 112 – DEPENDENT**

The invention of Claim 112 includes each recitation of Claim 111, with the learning module also including a perception unit for processing output from the sensors to determine a state of the operating system and a state of the interface unit. See, page 14, line 8, to page 15, line 7, of the Specification.

**CLAIM 113 – DEPENDENT**

The invention of Claim 113 includes each recitation of Claim 112, with the learning module also including a reasoning system for updating the knowledge base and for learning an association between an alteration of the interface unit and a state of the operating system. See, page 31, line 28, to page 32, line 23, of the Specification.

**CLAIM 114 – DEPENDENT**

The invention of Claim 114 includes each recitation of Claim 109, with the learning module also including at least one of an artificial intelligence algorithm and a machine learning algorithm. See, page 7, lines 8-12, of the Specification.

**CLAIM 115 – DEPENDENT**

The invention of Claim 115 includes each recitation of Claim 109, with the learning module maximizing a percentage of proactive alterations leading to a direct user selection from the alteration. See, page 12, line 35, to page 13, line 9, of the Specification.

**CLAIM 116 – DEPENDENT**

The invention of Claim 116 includes each recitation of Claim 115, with the maximizing being performed through learning reinforcement. See, page 12, line 24, to page 13, line 9, of the

Specification.

**CLAIM 117 – DEPENDENT**

The invention of Claim 117 includes each recitation of Claim 116, with the learning reinforcement performed through an iterative learning process. See, page 13, lines 16-19, of the Specification.

**CLAIM 118 – DEPENDENT**

The invention of Claim 118 includes each recitation of Claim 117, with each iteration of the learning process being performed after the alteration has been performed. See, page 13, lines 16-19, of the Specification.

**CLAIM 119 – DEPENDENT**

The invention of Claim 119 includes each recitation of Claim 1, wherein the proactively altering of the at least one function of the interface unit includes activating an additional software application through the operating system. See, page 36, line 6, to page 37, line 2, of the Specification.

**CLAIM 120 – DEPENDENT**

The invention of Claim 120 includes each recitation of Claim 119, further including an intelligent agent capable of communicating with a human user. See, page 5, lines 6-10, page 7, lines 13-32, of the Specification.

**CLAIM 121 – DEPENDENT**

The invention of Claim 121 includes each recitation of Claim 120, with an intelligent agent controlling at least one interaction of the computational device over a network. See, page 41, lines 3-18, of the Specification.

**CLAIM 122 – INDEPENDENT**

The invention as recited in Claim 122 relates to a method for a proactive interaction between a user and a computational device through a user interface, with the computational

device having an operating system. In the invention, a pattern of user behavior is detected according to at least one interaction of the user with the user interface by using a learning module. See, page 7, line 33, to page 8, line 3, and page 9, line 19, to page 10, line 9, of the Specification.

The invention also proactively alters at least one function of the user interface according to the pattern. See, Figs. 1-7C, page 9, line 19, to page 10, line 16, and page 15, lines 1-7, page 12, lines 8-23, of the Specification.

**CLAIM 123 – DEPENDENT**

The method of Claim 123 includes each recitation of Claim 122, with the at least one pattern selected from the group consisting of a pattern determined according to at least one previous interaction of the user with the user interface, and a predetermined pattern, or a combination thereof. See, page 9, line 35, to page 10, line 24, of the Specification.

**CLAIM 124 – DEPENDENT**

The method of Claim 124 includes each recitation of Claim 122, with the user interface featuring a graphical display and the altering at least one function of the user interface includes altering at least a portion of the graphical display. See, page 9, line 23, to page 10, line 15, and page 12, lines 8-15, of the Specification.

**CLAIM 125 – DEPENDENT**

The method of Claim 125 includes each recitation of Claim 124, with the altering of at least a portion of the graphical display including selecting a menu for display according to the detected pattern and displaying the menu. See, page 9, line 23, to page 10, line 15, of the Specification.

**CLAIM 126 – DEPENDENT**

The method of Claim 126 includes each recitation of Claim 125, with the selecting of the menu including constructing a menu from a plurality of menu options. See, page 16, lines 3-17, of the Specification.

**CLAIM 127 – DEPENDENT**

The method of Claim 127 includes each recitation of Claim 122, with the user interface featuring an audio display and the altering of at least one function of the user interface including altering at least one audible sound produced by the computational device. See, page 11, lines 5-10, of the Specification.

**CLAIM 128 – DEPENDENT**

The method of Claim 128 includes each recitation of Claim 122, with the computational device selected from a group consisting of a regular computer, an ATM, a cellular telephone, a mobile information device, a PDA, or a consumer appliance having an operating system. See, page 10, lines 25-30, of the Specification.

**CLAIM 129 – DEPENDENT**

The method of Claim 129 includes each recitation of Claim 122, with the learning module including a knowledge base, and further including holding information gathered as a result of interactions with the user and/or the operating system by using the knowledge base. See, page 13, line 31, to page 14, line 7, and page 16, line 34, to page 18, line 20, of the Specification.

**CLAIM 130 – DEPENDENT**

The method of Claim 130 includes each recitation of Claim 129, with the knowledge base including a plurality of integrated knowledge determined from the behavior of the user and from preprogrammed information. See, page 4, lines 8-14, to page 18, lines 14-20, of the Specification.

**CLAIM 131 – DEPENDENT**

The method of Claim 131 includes each recitation of Claim 129, with the learning module further including a plurality of sensors, with sensors used to perceive a state of the operating system. See, page 14, lines 1-7, and page 30, line 33, to page 31, line 6, of the Specification.

**CLAIM 132 – DEPENDENT**

The method of Claim 132 includes each recitation of Claim 131, with the learning module also including a perception unit used to process output from the sensors and determine a state of the operating system and a state of the user interface. See, page 14, line 8, to page 15, line 7, of the Specification.

**CLAIM 133 – DEPENDENT**

The method of Claim 133 includes each recitation of Claim 132, with the learning module also including a reasoning system used to update the knowledge base and learn an association between an alteration of the user interface and a state of the operating system. See, page 31, line 28, to page 32, line 23, of the Specification.

**CLAIM 134 – DEPENDENT**

The method of Claim 134 includes each recitation of Claim 129, with the learning module also including at least one of an artificial intelligence algorithm and a machine learning algorithm, and the method is performed by the learning module. See, page 7, lines 8-12, of the Specification.

**CLAIM 135 – DEPENDENT**

The method of Claim 135 includes each recitation of Claim 129, with the learning module maximizing a percentage of proactive alterations leading to a direct user selection from the alteration. See, page 12, line 35, to page 13, line 9, of the Specification.

**CLAIM 136 – DEPENDENT**

The method of Claim 136 includes each recitation of Claim 135, with the maximization performed through learning reinforcement. See, page 12, line 24, to page 13, line 9, of the Specification.

**CLAIM 137 – DEPENDENT**

The method of Claim 137 includes each recitation of Claim 136, with the learning

reinforcement performed through an iterative learning process. See, page 13, lines 16-19, of the Specification.

**CLAIM 138 – DEPENDENT**

The method of Claim 138 includes each recitation of Claim 137, with the iteration of the learning process performed after the alteration has been performed. See, page 13, lines 16-19, of the Specification.

**CLAIM 139 – DEPENDENT**

The method of Claim 139 includes each recitation of Claim 122, with the proactively altering of the at least one function of the user interface includes activating an additional software application through the operating system. See, page 36, line 6, to page 37, line 2, of the Specification.

**CLAIM 140 – DEPENDENT**

The method of Claim 140 includes each recitation of Claim 139, with the method performed using an intelligent agent capable of communicating with a human user. See, page 5, lines 6-10, page 7, lines 13-32, of the Specification.

**CLAIM 141 – DEPENDENT**

The method of Claim 141 includes each recitation of Claim 140, with the intelligent agent controlling at least one interaction of the computational device over a network. See, page 41, lines 3-18, of the Specification.

**GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

**GROUND OF REJECTION 1 (Claims 1-7 and 109-141)**

Claims 1-7 and 109-141 are rejected under 35 U.S.C. §102(b) as allegedly being unpatentable by U.S. Patent No. 6,400,996 to Hoffberg et al. (herein “Hoffberg”).

**ARGUMENT**

1. **FIRST BASIS FOR APPEAL (Claims 1-7 and 109-141)**

The rejection of Claims 1-7 and 109-141 under 35 U.S.C. § 102(b) is in error at least because Hoffberg fails not disclose *proactively altering at least one function of said interface unit according to said detected pattern*, as recited in Claims 1 and 122, which are the pending independent claims. In regard to this recitation, the Examiner cites Fig. 15 and Col. 85, lines 5-67, of Hoffberg et al. (See page 5 of August 22, 2007 Office Action.)

Appellant’s response of November 21, 2007, explained that Fig. 15 of Hoffberg et al. “is a flow diagram of a predictive user interface,” as described at Col. 83, line 14, of Hoffberg. Nowhere in Fig. 15, at Col. 85, lines 5-67, or elsewhere does Hoffberg disclose a proactive altering according to a detected pattern, as recited in the pending claims. Contrary to the Examiner’s assertion, the cited portions of Hoffberg teach providing “[f]requently used choices for program selections [...] to reduce the number of programming steps.” (Col. 85, lines 18-20, of Hoffberg et al.) Providing frequently used choices of program selections fails to disclose proactive altering of at least one function of said interface unit according to said detected pattern, as claimed in the present invention.

For at least the above reason, Appellant has shown that there are claimed features not disclosed by Hoffberg, and has thus shown that Claims 1-7 and 109-141 were erroneously rejected under 35 U.S.C. § 102(b). Accordingly, for at least this reason the Examiner has not established a *prima facie* showing of anticipation and the rejection must be withdrawn.

2. SECOND BASIS FOR APPEAL (Claims 1-7 and 109-141)

The rejection of Claims 1-7 and 109-141 under 35 U.S.C. § 102(b) is also in error at least in view of the Examiner’s improper citation to multiple references. It is well settled that a “claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also M.P.E.P. § 2131.

However, in the Final Office Action dated February 4, 2008, the Examiner failed to include any additional citations to the disclosure of Hoffberg et al. to advance prosecution in regard to the anticipation rejection. Rather, the Examiner improperly attempted to “point to the extensive background section of Hoffberg that lists several pattern recognition patents that provide for altering a broadly recited function of the interface.” (Final Office Action, page 6.)

In an Advisory Action mailed April 21, 2008, the Examiner repeats that “what is relevant [is] the background art (See column 1, lines 30-50)” of Hoffberg (lines 8-9 of Continuation Sheet of the Advisory Action). However, the cited portion of Hoffberg is an extended list of articles cited as “general-purpose-type computer systems.” (Col. 2, lines 22-23 of Hoffberg.)

The Examiner’s attempt to include in the anticipation rejection “several pattern recognition patents” ignores the well settled law that a claim can be found to be “anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (Emphasis supplied). Also see M.P.E.P. § 2131. Indeed, the Examiner’s assertion is an admission that Hoffberg fails to anticipate the pending claims.

In the Advisory Action, the Examiner refers to M.P.E.P. § 2163.07 as allegedly “specifically stat[ing] that incorporated by reference patent are as much a part of the text as filed then if they were repeated in the text.” (Advisory Action, continuation sheet.) The Examiner’s citation to M.P.E.P. § 2163.07 incorrectly ignores the purpose of M.P.E.P. § 2163.07, which is to assess compliance with the enablement requirement of 35 U.S.C. § 112, second paragraph, regarding whether “new matter” is being added when a specification. See M.P.E.P. § 2163.07(b). Also see M.P.E.P. § 608.01(p) and 37 CFR 1.57.

M.P.E.P. § 2163.07 that the Examiner relies upon is not applicable. Rather, M.P.E.P. § 2131.01 addresses the situation presented here by the Examiner's use of more than one reference in an anticipation rejection. M.P.E.P. § 2131.01 states that:

"Normally, only one reference should be used in making a rejection under 35 U.S.C. 102. However, a 35 U.S.C. 102 rejection over multiple references has been held to be proper when the extra references are cited to:

- "(A) Prove the primary reference contains an 'enabled disclosure;'
- "(B) Explain the meaning of a term used in the primary reference; or
- "(C) Show that a characteristic not disclosed in the reference is inherent."

The Examiner has failed to indicate why any of the above three exceptions might apply.

Accordingly, it is improper and incorrect for the Examiner to rely on more than a single reference in this anticipation rejection.

For at least the above reason, Appellant has shown that there are claimed features not disclosed by Hoffberg, and has thus shown that Claims 1-7 and 109-141 were erroneously rejected under 35 U.S.C. § 102(b). Accordingly, for at least this reason the Examiner has not established a *prima facie* showing of anticipation and the rejection must be withdrawn.

**CONCLUSION**

As the Examiner has failed to make out a *prima facie* case for an anticipation rejection, the rejection of Claims 1-15 must be reversed.

It is well settled that a "claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also M.P.E.P. §2131. The Examiner has failed to show that each and every element of Claims 1-15 is found in Hoffberg. Accordingly, the Examiner has failed to make out a *prima facie* showing of anticipation, and the rejection must be withdrawn.

Dated: July 7, 2008

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CLAIMS APPENDIX

The claims involved in the appeal are:

1. (Previously Presented) A proactive user interface for a computational device, the computational device having an operating system, comprising:
  - (a) an interface unit for communicating between a user and said operating system; and
  - (b) a learning module for detecting at least one pattern of interaction of the user with said interface unit and for proactively altering at least one function of said interface unit according to said detected pattern.
2. (Previously Presented) The proactive user interface of claim 1, wherein said at least one pattern is selected from the group consisting of a pattern determined according to at least one previous interaction of the user with said interface unit, and a predetermined pattern, or a combination thereof.
3. (Previously Presented) The proactive user interface of claim 1, wherein said interface unit features a graphical display and said altering at least one function of said interface unit comprises altering at least a portion of said graphical display.
4. (Original) The proactive user interface of claim 3, wherein said altering at least a portion of said graphical display comprises:

selecting a menu for display according to said detected pattern; and  
displaying said menu.
5. (Original) The proactive user interface of claim 4, wherein said selecting said menu comprises:

constructing a menu from a plurality of menu options.

6. (Previously Presented) The proactive user interface of claim 1, wherein said interface unit features an audio display and said altering at least one function of said interface unit comprises altering at least one audible sound produced by the computational device.

7. (Previously Presented) The proactive user interface of claim 1, wherein the computational device is selected from the group consisting of a regular computer, an ATM, mobile information devices including a cellular telephone, a PDA, or a consumer appliance having an operating system.

8 – 108 (Cancelled)

109. (Previously Presented) The proactive user interface of claim 7, wherein said learning module comprises a knowledge base for holding information gathered as a result of interactions with the user and/or the operating system.

110. (Previously Presented) The proactive user interface of claim 109, wherein said knowledge base comprises a plurality of integrated knowledge determined from the behavior of the user and from preprogrammed information.

111. (Previously Presented) The proactive user interface of claim 109, wherein said learning module further comprises a plurality of sensors for perceiving a state of the operating system.

112. (Previously Presented) The proactive user interface of claim 111, wherein said learning module further comprises a perception unit for processing output from said sensors to determine a state of the operating system and a state of said interface unit.

113. (Previously Presented) The proactive user interface of claim 112, wherein said learning module further comprises a reasoning system for updating said knowledge base and for learning an association between an alteration of said interface unit and a state of the operating system.

114. (Previously Presented) The proactive user interface of claim 109, wherein said learning module further comprises at least one of an artificial intelligence algorithm and a machine learning algorithm.

115. (Previously Presented) The proactive user interface of claim 109, wherein said learning module maximizes a percentage of proactive alterations leading to a direct user selection from said alteration.

116. (Previously Presented) The proactive user interface of claim 115, wherein said maximization is performed through learning reinforcement.

117. (Previously Presented) The proactive user interface of claim 116, wherein said learning reinforcement is performed through an iterative learning process.

118. (Previously Presented) The proactive user interface of claim 117, wherein each iteration of said learning process is performed after said alteration has been performed.

119. (Previously Presented) The proactive user interface of claim 1, wherein said proactively altering at least one function of said interface unit comprises activating an additional software application through the operating system.

120. (Previously Presented) The proactive user interface of claim 119, further comprising an intelligent agent capable of communicating with a human user.

121. (Previously Presented) The proactive user interface of claim 120, wherein said intelligent agent controls at least one interaction of the computational device over a network.

122. (Previously Presented) A method for a proactive interaction between a user and a computational device through a user interface, the computational device having an operating system, the method comprising:

detecting a pattern of user behavior according to at least one interaction of the user with the user interface by using a learning module; and

proactively altering at least one function of the user interface according to said pattern.

123. (Previously Presented) The method of claim 122, wherein said at least one pattern is selected from the group consisting of a pattern determined according to at least one previous interaction of the user with said user interface, and a predetermined pattern, or a combination thereof.

124. (Previously Presented) The method of claim 122, wherein said user interface features a graphical display and said altering at least one function of said user interface comprises altering at least a portion of said graphical display.

125. (Previously Presented) The method of claim 124, wherein said altering at least a portion of said graphical display comprises:

selecting a menu for display according to said detected pattern; and  
displaying said menu.

126. (Previously Presented) The method of claim 125, wherein said selecting said menu comprises:

constructing a menu from a plurality of menu options.

127. (Previously Presented) The method of claim 122, wherein said user interface features an audio display and said altering at least one function of said user interface comprises altering at least one audible sound produced by the computational device.

128. (Previously Presented) The method of claim 122, wherein the computational device is selected from the group consisting of a regular computer, an ATM, a cellular telephone, a mobile information device, a PDA, or a consumer appliance having an operating system.

129. (Previously Presented) The method of claim 122, wherein said learning module

comprises a knowledge base, and the method further comprises holding information gathered as a result of interactions with the user and/or the operating system by using said knowledge base.

130. (Previously Presented) The method of claim 129, wherein said knowledge base comprises a plurality of integrated knowledge determined from the behavior of the user and from preprogrammed information.

131. (Previously Presented) The method of claim 129, wherein said learning module further comprises a plurality of sensors, and uses said sensors to perceive a state of the operating system.

132. (Previously Presented) The method of claim 131, wherein said learning module further comprises a perception unit, and uses said perception unit to process output from said sensors and determine a state of the operating system and a state of said user interface.

133. (Previously Presented) The method of claim 132, wherein said learning module further comprises a reasoning system, and uses said reasoning system to update said knowledge base and learn an association between an alteration of said user interface and a state of the operating system.

134. (Previously Presented) The method of claim 129, wherein said learning module further comprises at least one of an artificial intelligence algorithm and a machine learning algorithm, and the method is performed by the learning module.

135. (Previously Presented) The method of claim 129, wherein said learning module maximizes a percentage of proactive alterations leading to a direct user selection from said alteration.

136. (Previously Presented) The method of claim 135, wherein said maximization is performed through learning reinforcement.

137. (Previously Presented) The method of claim 136, wherein said learning reinforcement is performed through an iterative learning process.

138. (Previously Presented) The method of claim 137, wherein each iteration of said learning process is performed after said alteration has been performed.

139. (Previously Presented) The method of claim 122, wherein said proactively altering at least one function of said user interface comprises activating an additional software application through the operating system.

140. (Previously Presented) The method of claim 139, wherein the method is performed using an intelligent agent capable of communicating with a human user.

141. (Previously Presented) The method of claim 140, wherein said intelligent agent controls at least one interaction of the computational device over a network.

142-179        (Cancelled)

**EVIDENCE APPENDIX**

- No evidence is submitted pursuant to §§ 1.130, 1.131, or 1.132 of 37 C.F.R.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.